


No: 001  
Date: July 25, 2018

Product: LVS-95XX  
Type: Software Update

## LVS-95XX Software 4.4.0.4106 – Release Notes

**Summary:**

LVS-95XX Software, Omron Microscan’s proprietary 1D and 2D symbol verification software for use with all LVS-95XX products, provides an intuitive way to verify virtually any symbology to a wide variety of standards. LVS-95XX Software supports Windows® 7 Professional and Windows® 10 Pro.

Feature	Description	Benefits
<p><b>Updated Product Performance</b></p> 	<p>Support of new High Resolution Version of LVS-9580 DPM and LVS-9585</p>	<ul style="list-style-type: none"> <li>Allows for grading of DPM DataMatrix marks as small as 2 mil x-dimension, and DataMatrix barcodes on labels with x-dimension of 4 mil.</li> </ul>
<p><b>General Improvements</b></p>	<p>Multiple Functionality and Performance Improvements</p>	<ul style="list-style-type: none"> <li>Updated Japanese translation file.</li> <li>Updates to meet GS1 2018 General Specification, including new Application Identifiers.</li> <li>Added historical ANSI letter grade to the grading report</li> <li>Product firmware enhancements.</li> <li>Functionality enhancements.</li> <li>Bug fixes.</li> </ul>

Specifications and prices in this product news are as of the issue date and are subject to change without notice. Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.

**Note: It is recommended to first uninstall previous versions of LVS-95XX Software before installing version 4.4.0.XXXX. If installing on a new PC then the database file (.mdb) must be copied from the existing PC to the new PC LVS-95XX program folder – see the user manuals for further information.** Please see the following pages for more detail about updates and improvements. A complete software version history is available from the archive tab of LVS-95XX software.

## LVS-95XX Software Features

- For use with all LVS-95XX Products. See restrictions listed in the New Features, Updates and Improvements section on the following page.
- Comprehensive support of symbologies and verification standards.
- Intuitive user interface.
- Software upgrade options include Multi-Sector, DPM (LVS-9580) and Enhanced Application Identifier Verification (EAIV).

## New Features, Updates, and Improvements

This new version of LVS-95XX Software includes several improvements and additions to functionality.

- All LVS-95XX products support this version of the software.
- Updated functionality to comply with GS1 2018 General Specification.
- Improved DPM grading performance compared to v. 4.3.0 with greater ability to grade a DPM symbol.
- Support of new LVS-958x HD high resolution models.

## LVS-95XX Software Version History November 2017 – July 2018

A summary of important software changes from January 2016 through June 2018 is shown below. A complete software version history is available from the archive tab of LVS-95XX Software.

Version	Release Date	Comment
4.4.0.xxxx	July 25, 2018	Update Japanese translation file.
4.4.0.xxxx	June 4, 2018	Update for modified LVS-9570 driver PCB
4.4.0.100x	May 5, 2018	Record minimum passing grade when pass/fail option used
4.4.0.100x	May 5, 2018	Fix incorrect Invalid AI warning shown after <GS>
4.4.0.100x	May 5, 2018	Change report label from GS1 Pass/Fail to be GS1 Data Structure Pass/Fail
4.4.0.100x	May 5, 2018	Fix incorrect Extraneous FNC1 warning
4.4.0.100x	May 5, 2018	Fix issue with Ctrl + Shift trigger timeout
4.4.0.100x	May 5, 2018	Restore ability for LVS-9570 to use automatic sector
4.4.0.100x	May 5, 2018	Allow either <GS> or <232> as separators in GS1 Data Matrix codes
4.4.0.100x	May 5, 2018	Update max Xdim for Table 6 GS1 Data Matrix (per Gen Spec 18)
4.4.0.100x	May 5, 2018	Add 2018 GS1 Gen Spec AIs; 714, 8013. New AI for NHRN Portugal and New GS1 identification key: Global Model Number (GMN)
4.4.0.100x	May 5, 2018	Resolve Run Time error when connecting to an existing MS SQL database
4.3.1.xxxx	Jan. 7, 2018	Add new standards for non-DPM versions of Mil-130
4.3.1.xxxx	Jan. 7, 2018	Allow 9510 factory calibration via phone support
4.3.0.3006	08-Nov-2017	Allow user to disable decimal grading without using password of the day.
4.3.0.3006	08-Nov-2017	Default setting that provides decimal grading as default for grading parameters.
4.3.0.3003	20-Oct-2017	Extend maximum length of AIs 91 through 99 to be 90 characters.
4.3.0.3xxx	20-Oct-2017	Include decimal for Rmin, Rmax, and GT.
4.3.0.1xxx	18-Oct-2017	Implement ISO/IEC 15416:2016(E) interpolation rule
4.2.1.3xxx	16-Sep-2017	Automatically detect and draw blue sector box around symbol in DPM mod.
4.2.0.3xxx	08-Sep-2017	Implement ability to read QR Codes when set for DPM.
4.2.0.3xxx	23-Aug-2017	Fix HIBC error when code switch occurs inside \$\$+7 format.
4.2.0.3xxx	23-Aug-2017	Update Japanese Translation File.
4.2.0.3xxx	06-Jul-2017	Fix error in PZN check digit calculation for 2D symbols.
4.2.0.3xxx	06-Jul-2017	Implement new clock track tracking algorithm for DPM.

4.2.0.3xxx	06-Jul-2017	Show additional lighting information.
4.2.0.3xxx	06-Jul-2017	Drop support of Lumenera cameras.
4.2.0.3xxx	06-Jul-2017	Implement more sophisticated event handler.
4.2.0.3xxx	06-Jul-2017	Improve build info displayed when double-clicking version.
4.2.0.3xxx	06-Jul-2017	Include changes from GS1 General Specifications V17.
4.2.0.3xxx	06-Jul-2017	Show HIBC structure if DPM and first character is a '+'.
4.2.0.3xxx	06-Jul-2017	Support Taiwan language and character set.
4.2.0.3xxx	06-Jul-2017	Upgrade to Visual Studio 2015 runtime.
4.2.0.3xxx	06-Jul-2017	Use dfu-programmer instead of Atmel Flip.
4.2.0.3xxx	06-Jul-2017	Use Inno Setup instead of InstallShield.
4.1.0j	23-Jan-2017	Fix overly bright images when upgrading which only affects certain LVS-9580s.
4.1.0i	13-Jan-2017	Fix bug related to blank passwords and ActiveDirectory.
4.1.0i	13-Jan-2017	Remove logic to detect contrast label during calibration, as it is unreliable.
4.1.0i	13-Jan-2017	Update Polish translation file.
4.1.0h	10-Jan-2017	Fix exposure decimal places.
4.1.0g	27-Dec-2016	Accept GS1-128 calibration card.
4.1.0g	27-Dec-2016	Avoid overflow error while minimized.
4.1.0g	27-Dec-2016	Avoid overly bright images when upgrading from older versions.
4.1.0g	27-Dec-2016	Fix problem with calibration with bright images.
4.1.0g	27-Dec-2016	Fix symbology errors on tables 7.2, 7.3, and 7.4.
4.1.0g	27-Dec-2016	Improve system responsiveness during focus calibration.
4.1.0f	07-Nov-2016	Fix calibration not being reloaded when shortcut key used to change application standard.
4.1.0f	07-Nov-2016	Update 0410 Italian translation.
4.1.0e	04-Nov-2016	Don't report 'D' for dome lighting on non-LVS-9580 systems.
4.1.0e	04-Nov-2016	Eliminate image jumping once image is stable.
4.1.0e	04-Nov-2016	Fix problem with reference reports and SQL Server.
4.1.0e	04-Nov-2016	Fix update problem with MySQL.
4.1.0e	04-Nov-2016	Reload calibration when changing application standards.
4.1.0e	04-Nov-2016	Update manuals.
4.1.0d	20-Oct-2016	Don't allow Data Matrix when set for MIL-STD-130N Linear (1D).
4.1.0d	20-Oct-2016	Fix stitching with LVS-9510/ LVS-9580/ LVS-9585.
4.1.0d	20-Oct-2016	Update CompactLvsDB to include Microscan in search.
4.1.0c	18-Oct-2016	Fix comma vs. period for GS1SpecificationTables.
4.1.0c	18-Oct-2016	Fix MicroPDF vs. Interleaved 2 of 5 misread.
4.1.0c	18-Oct-2016	Record structure information in database so it can be recalled and reprinted.
4.1.0c	18-Oct-2016	Try to read QR Code when set for DPM.
4.1.0b	11-Oct-2016	Grade tilted DPM but issue warning if applicable.
4.1.0b	11-Oct-2016	Implement non-integral exposure.
4.1.0a	05-Oct-2016	Avoid error when review report earlier than the latest report.
4.1.0a	05-Oct-2016	Don't accept Defects symbol in calibration mode.
4.1.0a	05-Oct-2016	Fix calibration not working in Manual grading mode.
4.1.0a	05-Oct-2016	Plot Micro QRCode format cells properly.
4.1.0a	05-Oct-2016	Show LVS-9585 as a choice on optional features.
4.1.0a	05-Oct-2016	Show green crosshair on LVS-9580 while moving.
4.1.0a	05-Oct-2016	Show yellow border while trigger is held.
4.1.0	27-Sep-2016	Fix problems when interrupting processing.
4.1.0	27-Sep-2016	Fix problems when switching cameras.

4.1.0	27-Sep-2016	Instead of beeping, delay operations where possible.
4.0.0n	23-Sep-2016	Implement GS1 Table 7.
4.0.0m	19-Sep-2016	Finish DPM2 implementation.
4.0.0m	19-Sep-2016	Fix HIBC link character.
4.0.0m	19-Sep-2016	Implement new background/multithread model for slower operations.
4.0.0m	19-Sep-2016	Remember AutoPrint setting and don't reset when changing tabs.
4.0.0L	02-Sep-2016	Placeholder for unreleased version.
4.0.0k	26-Aug-2016	Changes to Speedup creation of users from Active Directory.
4.0.0k	26-Aug-2016	Fix HIBC issue - Unrecognized data identifier.
4.0.0j	07-Jun-2016	Fixed issue with SQL dB, file access error 75 for Windows users without admin rights.
4.0.0h	25-Apr-2016	Add 2D symbologies to GS1 table 4.
4.0.0h	25-Apr-2016	Add 2D symbologies to GS1 table 7.
4.0.0h	25-Apr-2016	Added AI (394) Percentage discount of a coupon.
4.0.0h	25-Apr-2016	Added AI (8012) Software version.
4.0.0h	25-Apr-2016	Added AI (8111) Loyalty points of a coupon.
4.0.0h	25-Apr-2016	Change GS1-128 Table 11 aperture to 5.
4.0.0h	25-Apr-2016	Clean up and sort translation files.
4.0.0h	25-Apr-2016	Fix Active Directory bug when there are no users in the LVS All Users group.
4.0.0h	25-Apr-2016	Fix problem misidentifying older LVS-9580 units.
4.0.0h	25-Apr-2016	Fixed incorrect error about missing leader bars in Data Matrix codes.
4.0.0h	25-Apr-2016	Fixed missing AI (30) in AI report.
4.0.0h	25-Apr-2016	Remove obsolete manuals.
4.0.0h	25-Apr-2016	Try more persistently to read UPC/EAN codes with a wrong check digit.
4.0.0h	25-Apr-2016	Use data identifiers for MIL-STD-130N.
4.0.0g	10-Mar-2016	Fix ConfirmEngineType to catch Microsoft SQL 2014.
4.0.0g	10-Mar-2016	Fix MySQL MaxValue is reserved keyword; add delimiters when engine type is MySQL.
4.0.0g	10-Mar-2016	Fix SQL Stmt. error in ActiveDirectoryIntegration. Use UPPER for MySQL and MSSQL.
4.0.0g	10-Mar-2016	Fix error in ExportReferenceCommand by using MSSQL Database.
4.0.0g	10-Mar-2016	Improve Microscan logo.
4.0.0g	10-Mar-2016	Include rebranded manuals.
4.0.0g	10-Mar-2016	Restore internal designations of Atmel-based LVS-9570 units.
4.0.0g	10-Mar-2016	Revert translation files pending redesign.
4.0.0f	04-Feb-2016	Bump revision letter.
4.0.0e	02-Feb-2016	Include proper AIs in report for composite symbols.
4.0.0e	02-Feb-2016	Include separate structure reports for 1D and 2D if applicable.
4.0.0e	02-Feb-2016	Preserve ActiveDirectory settings when copying database.
4.0.0d	27-Jan-2016	Change default exposure for LVS-9580 from 40 to 70 ms.
4.0.0d	27-Jan-2016	Support new red/white lighting for LVS-9580 camera.
4.0.0c	24-Jan-2016	Add ActiveDirectory Log file and form setting to enable.
4.0.0c	24-Jan-2016	Add progress bar when creating operators from Active Directory.
4.0.0c	24-Jan-2016	Correct bug in Active Directory CreateUsersFromAD.
4.0.0c	24-Jan-2016	Fix HTML characters in "Manufactured By" field.
4.0.0c	24-Jan-2016	Fix unwritable UniCombo controls.
4.0.0c	24-Jan-2016	Rename old registry values.
4.0.0b	18-Jan-2016	Add ActiveDirectory Log file and form setting to enable.
4.0.0b	18-Jan-2016	Add progress bar with creating operators from Active Directory.

4.0.0b	18-Jan-2016	Correct bug in Active Directory CreateUsersFromAD.
4.0.0b	18-Jan-2016	Correct bug in new Data Matrix locator algorithm.
4.0.0a	13-Jan-2016	Improve Data Matrix locator algorithm.
4.0.0	06-Jan-2016	Rebrand as Microscan.
4.0.0	06-Jan-2016	Set modulation to 0 for scan lines which fail edge determination.